

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF AMENDMENT
17.30.1303, 17.30.1304, 17.30.1310,)	
17.30.1322, 17.30.1330, 17.30.1341 and)	
17.30.1343 pertaining to concentrated)	(WATER QUALITY)
animal feeding operations (CAFOs) and)	
adoption of Department Circular DEQ-9)	
(Montana Technical Standards for)	
CAFOs))	

TO: All Concerned Persons

1. On December 16, 2004, the Board of Environmental Review published MAR Notice No. 17-222 regarding a notice of public hearing on the proposed amendment of the above-stated rules at page 2962, 2004 Montana Administrative Register, issue number 24. A public hearing was conducted on January 14, 2005, and numerous comments were received. On June 16, 2005, at page 864, 2005 Montana Administrative Register, issue number 11, under MAR Notice No. 17-227, the Board published an amended notice to provide a six month extension of time for taking final action. On October 27, 2005, at page 1995, 2005 Montana Administrative Register, issue number 20, under MAR Notice No. 17-233, the Board published an amended notice of public hearing proposing to adopt the rules as originally proposed, except for certain provisions vacated by a federal court decision. The second public hearing was conducted on November 25, 2005.

2. The Board did not adopt the proposed amendments to ARM 17.30.1304, 17.30.1310 or 17.30.1341. The Board has amended ARM 17.30.1303, 17.30.1322, 17.30.1330, and 17.30.1343 exactly as proposed in MAR Notice No. 17-233, and has adopted Department Circular DEQ-9 with minor changes in response to comments.

3. The following comments were received and appear with the Board's responses:

COMMENT NO. 1: The Board received both written and oral comments concerning the development of Department Circular DEQ-9. Several agricultural consulting engineers complimented the Board for consolidating various environmental rules and providing design criteria. Commentors stated that Circular DEQ-9 provides guidance to consulting engineers and producers who elect to design their own systems.

RESPONSE: Comment noted.

COMMENT NO. 2: Numerous commentors stated that permit fees for concentrated animal feeding operations (CAFOs) are too high. Several of these

commentors contend that the high permit fees discourage unpermitted CAFOs from coming forward and obtaining permit coverage.

RESPONSE: These comments were submitted in January of 2005. In the spring of 2005 the Montana Legislature lowered CAFO permit fees. 75-5-803, MCA. The statutory fee reduction should help address the commentors' concern about the deterrent effect of high permit fees.

COMMENT NO. 3: Several commentors stated that the 30-day public comment period should be excluded from the CAFO permitting process.

RESPONSE: In the spring of 2005 the Legislature required most CAFO discharge permits to be issued using Water Quality Act general permit procedures. See 75-5-802, MCA. Under general permit procedures, the level of public review depends on the seriousness and complexity of the environmental issues and the level of public interest. For an action with limited environmental impact and little public interest, no public comment is required. However, an opportunity for public comment is required if there is the potential for significant environmental impacts, or if there is significant public interest in the Department's action. A public comment period is also required in cases where an individual CAFO permit is needed because a general permit authorization would not be sufficiently protective of water quality.

It should be noted that the Department may not deny a permit or a permit authorization based solely on unfavorable public comments. In order to affect the decision whether to issue a permit or an authorization, comments must pertain to whether the CAFO will comply with applicable water quality requirements in statute and rule.

COMMENT NO. 4: Several commentors stated that the proposed rules go beyond the authority of the Montana Water Quality Act by requiring all CAFOs to apply, regardless of their discharge status.

RESPONSE: These rules do not require all CAFOs to apply for permits regardless of their discharge status. The federal CAFO rules, as originally promulgated in 2003, did contain such "duty to apply" provisions. Under those provisions, every facility defined as a CAFO was required to obtain a discharge permit. Large facilities were defined as CAFOs based solely on the number and types of animals, without regard to the presence of an actual discharge. However, in February of 2005, a federal court vacated the "duty to apply" provisions in the 2003 federal CAFO rules. Waterkeeper Alliance, Inc., et al. v. USEPA, 399 F.3d 486 (2d Cir. 2005). In this rulemaking, the Board is incorporating the federal CAFO rules by reference, but the provisions in the federal rules that were vacated by the court will not be included. See MAR Notice No. 17-233.

COMMENT NO. 5: Several commentors stated that these regulations are too burdensome. The commentors pointed out that other sources of pollution, such as commercial fertilizer used by farmers, are not regulated to the same extent as the land application of generated waste from CAFOs.

RESPONSE: When EPA revised the effluent limitations guidelines for CAFOs in 2003, the agency conducted an economic analysis to determine what types of treatment technologies or best management practices would be economically

achievable by CAFOs. These proposed regulations have been determined to be cost-effective ways to reduce pollution from CAFOs. The federal Clean Water Act expressly requires discharges from CAFOs to be subject to permitting requirements, even though other agricultural operations are excluded.

COMMENT NO. 6: Several commentors stated that the Board does not have the authority to regulate the land application of waste from CAFOs. These commentors contend that the land application of manure and process-generated waste is a non-point source of pollution, and therefore, outside of the scope of the MPDES permitting program.

RESPONSE: The revised federal CAFO regulations, which are being incorporated by the Board in this rulemaking, define "discharge from a CAFO" to include discharges that result from the application of wastes to land areas under the CAFO's control. 40 CFR 122.23(e). A federal court has upheld EPA's authority, under the federal Clean Water Act, to regulate land application of wastes from CAFOs. Waterkeeper Alliance, Inc., et al. v. USEPA, 399 F.3d 486, 511 (2d Cir. 2005). The Board's statutory authority to adopt CAFO rules is found in 75-5-201, 75-5-304 and 75-5-401, MCA. In addition, 75-5-802(1), MCA, specifically directs the Board to incorporate by reference the federal CAFO regulations.

COMMENT NO. 7: Several commentors stated that the proposed rule package is more stringent than the federal regulations.

RESPONSE: Because the rules simply incorporate the federal CAFO requirements, the rules are not more stringent than the federal rules. No special stringency findings under 75-5-203 and 75-5-309, MCA, are required for the Board to adopt the state standards in Circular DEQ-9 because there are no comparable federal standards. That was the reason that EPA directed states to adopt standards like Circular DEQ-9. See 40 CFR 123.36.

COMMENT NO. 8: Several producers stated that the requirement that CAFOs prevent direct contact of confined animals with waters will prohibit livestock from accessing streams in Montana. Some commentors stated that this requirement was the first step to requiring fencing of all streams.

RESPONSE: The rules require that CAFOs implement best management practices to prevent direct contact of confined animals with waters. 40 CFR 122.42(e)(1)(iv). This requirement applies only to CAFO confinement areas. It does not prohibit range cattle from accessing streams, nor does it eliminate the use of properly designed water gaps.

COMMENT NO. 9: Several producers objected to the use of certified nutrient management planners to develop a nutrient management plan. Additionally, a few commentors inquired as to the qualifications of a certified nutrient management planner.

RESPONSE: The rules do not require the use of certified nutrient management planners to develop a nutrient management plan (NMP). Instead, the rules require that CAFOs report whether or not a certified nutrient management planner developed the facility's NMP. 40 CFR 122.42(e)(4)(vii). When EPA revised

the CAFO regulations, it originally proposed that all NMPs be developed by certified planners. After public comment, EPA decided that there was not enough information at this time to determine whether or not certified nutrient management planners were readily available to all CAFOs. Consequently, the revised rules require only that CAFOs report whether they used a certified planner. EPA will use this information for any future revisions to the CAFO rules.

The proposed Department Circular DEQ-9 provides information on how to find a certified planner in Montana. Certified planners include comprehensive nutrient management planners certified through the Natural Resource Conservation Service and crop advisors certified through the American Society of Agronomy.

COMMENT NO. 10: Several producers stated that the proposed recordkeeping requirements are too burdensome. Additionally, several commentors stated that the number of animals confined and the amount of waste generated is not relevant and cannot be accurately reported.

RESPONSE: The record keeping requirements are necessary to demonstrate the best management practices are being implemented at the CAFO. EPA determined that the best management practices, including routine inspections and the development and implementation of a nutrient management plan, were cost effective ways for CAFOs to reduce pollution.

Because the regulatory definition of a CAFO is based on the number of animals confined for 45 days or more in a 12-month period of time, the information about animal numbers is relevant. Information about the amount of waste generated is relevant to the goal of implementing management practices that are designed to properly manage the waste.

The Board realizes that it is sometimes difficult to summarize the annual waste produced at an operation, especially for open lot facilities where wastewater generation is dependent on rainfall. In order to aid producers, Circular DEQ-9 includes some guidance for calculating waste production. This information is provided for guidance only and is not a required method for calculating waste. To help avoid confusion about how this guidance is to be used, the Circular has been modified to contain procedures for adjusting the calculated daily manure production to reflect natural physical reductions due to evaporation, etc., at open lots. It is important to note that, although producers cannot predict the amount of rainfall they will receive, average rainfall statistics can be used to get a rough estimate of the amount of process wastewater generated at their operations.

COMMENT NO. 11: One producer stated that the specified containment requirements are too stringent.

RESPONSE: CAFOs are required to contain all process-generated wastewater plus the runoff and direct precipitation from a 25-year, 24-hour storm event. This requirement has been in place since the 1970s, and remains the same in the current rules, except for large swine, poultry, and veal calf operations designed and built after April 14, 2003. These latter operations are required, under the revised rules, to build waste control facilities to contain all process-generated wastewater plus the runoff and direct precipitation from a 100-year, 24-hour storm event. 40 CFR 412.46. EPA determined that large swine, poultry, and veal CAFOs

could feasibly meet this requirement because these animals are predominately maintained in confinement housing, without open confinement areas that generate large volumes of contaminated storm water runoff.

COMMENT NO. 12: Several commentors stated that the definitions of animal feeding operations (AFOs) and CAFOs are arbitrary. Additionally, one commentor stated that two or more AFOs under common ownership should only be considered as one if they both discharge to a common runoff control system.

RESPONSE: The regulatory definitions of AFOs and CAFOs are unchanged from the March 18, 1976, federal rule, so the comments about the animal numbers used in the definitions are outside the scope of this rulemaking. The new rules do remove the animal unit as an indicator and replace it with specific animal types. These changes are reasonably designed to address the potential for adverse effects on water quality from CAFOs.

The existing CAFO rules specify that two or more AFOs under common ownership are considered one if they adjoin each other or use a common disposal area. No change to this provision has occurred in the revised rules, so this comment is outside the scope of this rulemaking.

COMMENT NO. 13: Several producers questioned the authority of the Board to require proper mortality management. Additionally, the producers inquired why the Department's current CAFO permit application asks for information regarding programs to control odors, dust, flies, and rodents.

RESPONSE: The revised federal regulations specify that CAFOs must properly dispose of animal mortalities, and prohibit disposal of mortalities in any liquid waste control structure. 40 CFR 122.42(e)(1)(ii); 40 CFR 412.37(a)(4). The EPA determined that proper disposal of animal mortalities could be economically achieved by the CAFO industry and that this practice would further reduce the likelihood of pollutants being discharged into waters. Department Circular DEQ-9 references some additional requirements for animal mortality disposal. These requirements are already part of the state's solid waste rules and are summarized in the Circular so that producers are aware of additional requirements applicable to mortality disposal.

The Board's statutory authority for these rules is found in 75-5-201, 75-5-304 and 75-5-401, MCA. In addition, 75-5-802(1), MCA, specifically directs the Board to incorporate by reference the federal CAFO regulations.

The Department's application form requests information about programs for the control of odors, dust, flies, and rodents. The reason for this is to allow the Department to evaluate any water quality related concerns related to management of those problems. Programs used to control rodents and flies may involve the application of pesticides, resulting in pesticide-contaminated runoff discharging into the waste control structure. A dust control program may involve a spray system that may require additional containment, depending on the volume of water used for suppression.

COMMENT NO. 14: Several commentors questioned the authority of the Board to require that animal waste management systems be designed by qualified

individuals and/or licensed professional engineers. Additionally, one commentor questioned the Board's statutory authority to establish certain design criteria for animal waste management systems. Specifically, this commentor questioned the requirement to follow certain setback distances and application rates.

RESPONSE: The rules require CAFO facilities to be designed, constructed, operated and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour storm event (or 100-year, 24-hour storm event for large swine, poultry, or veal calf operations built after April 14, 2003). See, e.g., 40 CFR 412.31. Given the degree of technical knowledge necessary to design a waste control system, the Department originally proposed, in Circular DEQ-9, that plans and specifications should be submitted by a licensed professional engineer. However, after meeting with stakeholders in October of 2004, the Department changed this language to say that plans and specifications must be submitted by an individual qualified to design an animal waste management system. Circular DEQ-9, Section 1, page 5. This change was made so that other design professionals, such as extension specialists, and pre-engineered designs, like those offered through MidWest Plan Service, could be used. This change was appropriate given the deadlines by which producers must comply with these rules, uncertainty about the number of available licensed professional engineers, and the number of other qualified design professionals and/or plans currently available to producers. Because proper design of CAFO waste control systems is important to protect water quality, the Board's authority to adopt MPDES rules includes authority to adopt design standards for waste control systems and to require that such systems be designed by qualified persons.

The design criteria that are the subject of this comment are for the purpose of preventing pollution of state waters. The Board has authority to adopt such criteria under the Water Quality Act. It should be noted that the design criteria are not mandatory because a deviation procedure exists. In order to provide guidance for producers and design professionals as to what constitutes a properly designed system, Circular DEQ-9 contains a list of design criteria. These criteria are based on established industry standards that must be addressed during the design period of each facility. The Circular includes a provision allowing the Department to approve deviations from the listed criteria for situations where site-specific factors warrant a different approach.

The application rate that was questioned by the commentor comes directly from the Natural Resources Conservation Service design criteria for wastewater treatment strips. Under the proposed rules, producers are allowed and encouraged to request a deviation from the design criteria to reflect site-specific factors such as soil type, etc.

The setback distance that is questioned states that sewage lagoons constructed after October 1, 1993, may not be located within 500 feet of existing water wells. This requirement is not new, and reflects existing provisions in the Montana Water Quality Act at 75-5-605, MCA. The pollution potential from animal waste and contaminated storm water runoff that has been concentrated into one area is high. The term "sewage" includes animal wastes. 75-5-103(26), MCA. In order to help protect ground water quality from the contaminants present in this type

of waste, the Circular refers to the statutory setback between sewage lagoons and existing water wells.

COMMENT NO. 15: Several commentors asked that the Department do all that it can to return to the use of a general permit for CAFOs.

RESPONSE: Pursuant to legislation passed in 2005, most CAFO discharge permits will now be issued under Water Quality Act general permit procedures. See 75-5-802, MCA.

COMMENT NO. 16: Several commentors stated that the deadlines for the design and construction of animal waste management systems are not realistic.

RESPONSE: The rules do not contain deadlines for the design and construction of animal waste management systems. The deadlines in the rules require only that producers submit an application to the Department for the CAFO within a certain timeframe.

COMMENT NO. 17: The Natural Resources Conservation Service (NRCS) submitted comments relating to Circular DEQ-9. The comments noted inconsistencies with the basis for land application rates and suggestions for limiting the use of the Montana Fertilizer Guidelines. In addition, one producer commented that phosphorus based application may be too limiting for his operation.

RESPONSE: Changes have been made to the tables listed in proposed Circular DEQ-9 regarding the basis for land application rates. However, Table 21 of the Montana Fertilizer Guidelines will continue to be included in the proposed Circular. The Guidelines provide Montana-specific nutrient removal rates, nutrient requirements, and crop replacement/removal values for the harvested portion. The Guidelines were developed by Montana State University using multiple fields and crops over multiple years. When site-specific information is available or is known through actual field experience, the producer is required to maintain this information as part of the recordkeeping requirements to ensure that nutrients are applied at agronomic rates.

COMMENT NO. 18: A few comments were received regarding the proposed best management practices. One producer inquired as to how strictly these best management practices must be followed. Another commentor objected to the best management practice listed in proposed Circular DEQ-9 that states that animals must be prohibited from entering into waste containment structures or their dikes, unless expressly stated in a facility's Operation and Maintenance Plan and approved by the Department. The NRCS also suggested that the best management practices regarding the application of waste to frozen or snow-covered ground be modified to require identification of those application areas in the approved plan.

RESPONSE: Under the revised federal regulations, it is mandatory that CAFOs develop and implement best management practices to comply with the applicable effluent limitation guidelines. 40 CFR 122.42(e)(1). Circular DEQ-9 summarizes all of the best management practices that are set out in the federal regulations. Circular DEQ-9, Section 4. The Circular uses the terms "must" and "should" to distinguish between mandatory and recommended measures.

The rules require that all waste control facilities be properly operated and maintained. 40 CFR 122.42(e)(1)(i). During routine inspections and complaint investigations, the Department has documented numerous occasions where producers have destroyed their waste control structures by allowing animals access. The Circular clarifies that proper maintenance of a waste control structure would not ordinarily include the confining of animals in the lagoon or containment structure. Trampling of the dikes and berms would affect the containment structure's waste holding capabilities.

Circular DEQ-9 requires the producer to notify the Department prior to applying liquid manure or process wastewater to frozen ground. Circular DEQ-9, Section 4, page 18. This will allow the Department to review a proposed application site based on current conditions at the site at the time of application.

COMMENT NO. 19: The NRCS submitted comments asking that certain items in proposed Circular DEQ-9 be defined or clarified.

RESPONSE: Minor changes have been made to the Circular for clarity. Changes have been made to correct typographical errors and to incorporate wording for clarification. In addition, the terms "shall," "must," "may not," and "required" have been bolded to more clearly indicate enforceable provisions of the Circular. Terms such as "should," "may," and "recommended" are merely suggestions and are provided to assist producers in locating information.

COMMENT NO. 20: One commentator wanted to make sure that the Board rules did not go beyond the federal CAFO rules.

RESPONSE: See Response to Comment No. 7.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

/s/ James M. Madden
JAMES M. MADDEN
Rule Reviewer

By: /s/ Joseph W. Russell
JOSEPH W. RUSSELL, M.P.H.
Chairman

Certified to the Secretary of State, February 13, 2006.